



***Charging Ahead
into the
Next Millennium***

DARPATech '99
Denver • June 7-10, 1999





ISO

Information Systems Office

Dr. W. M. Mularie
Director



ISO

Agenda

- View of the Environment
- Programmatic Themes
- Program Implementation
- Opportunities



ISO

Environment

“What we believe about the world”

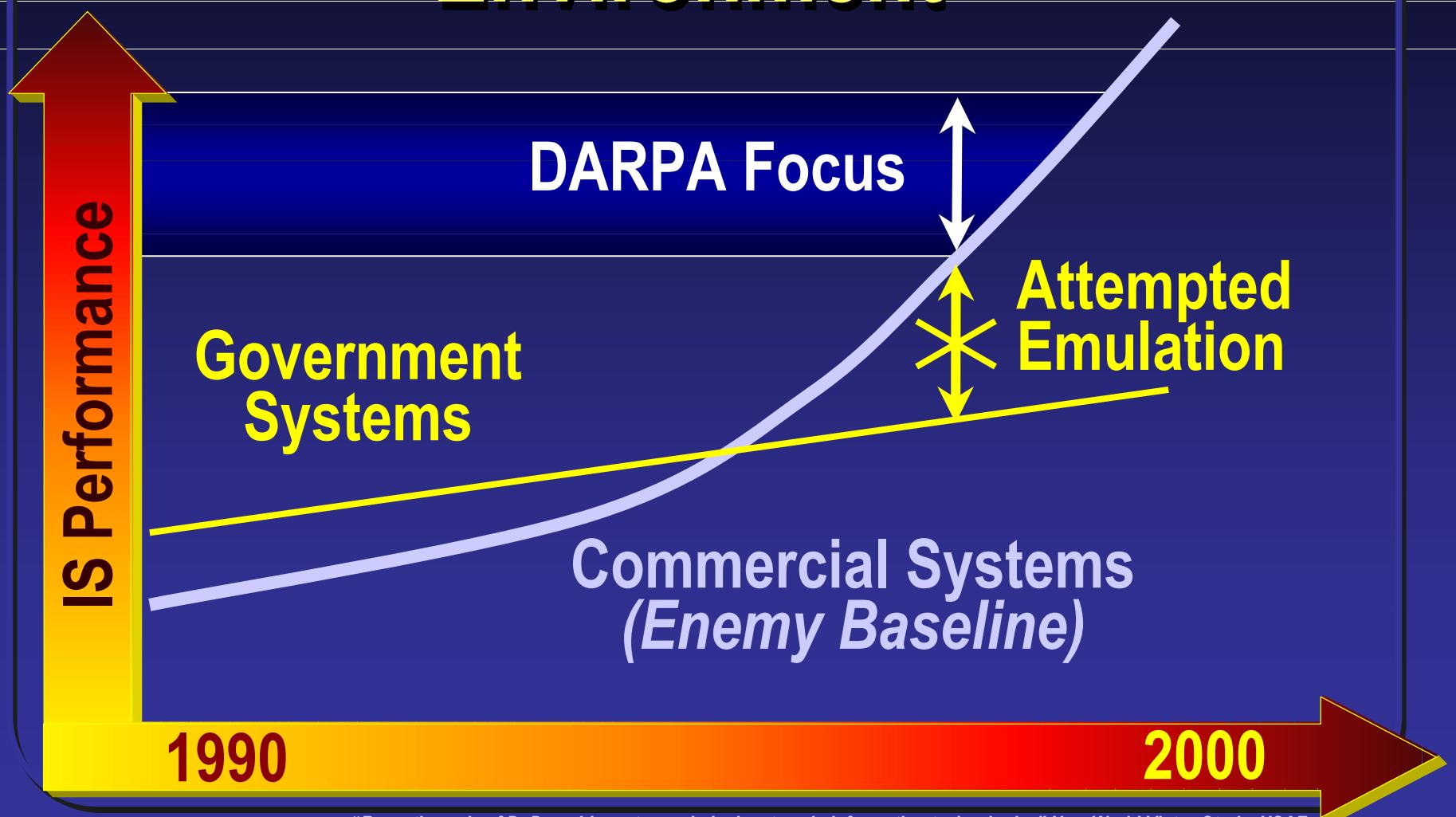
- **Reflects JV 2010 Information Superiority**
 - ◆ Network Centric Warfare
 - ◆ Digitization of the Battlefield
- **Heterogeneous World**
 - ◆ Intra / Inter (Joint)
 - ◆ Coalition
 - ◆ Commercial Market Driven
- **Threat**
 - ◆ Force on Force
 - ◆ Asymmetric Warfare





Commercial Market Driven Environment

ISO



"Recasting role of DoD could create needed advantage in information technologies" New World Vistas Study, USAF
Dr. William M. Mularie and Maj Gen Robert Rosenberg (Ret.)



ISO

ISO Response

- Strategic Cyber Defense
- Total Information Awareness
- Command & Control

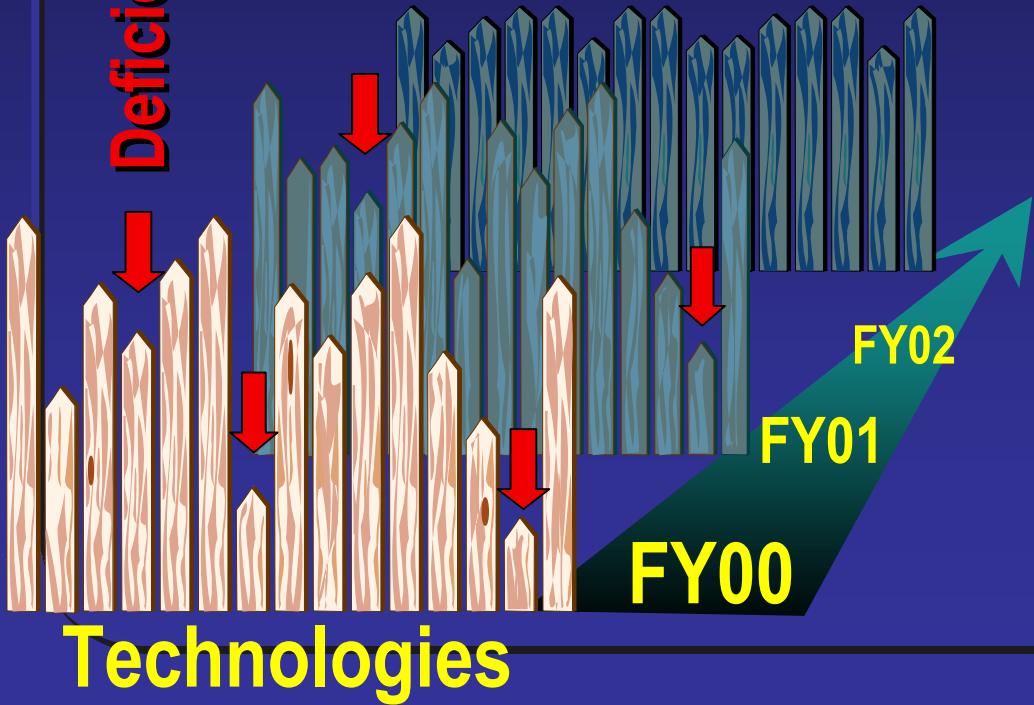


Strategic Cyber Defense *ISO*

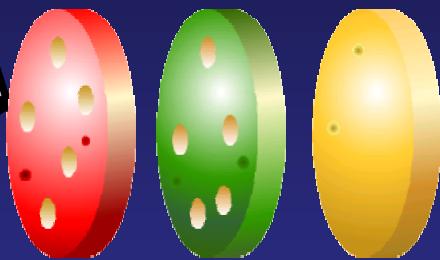
(Information Assurance)

Deficiencies

Trustworthy Systems
from Untrustworthy
Components



Layered Protection



- Prevention
- Detection
- Tolerance



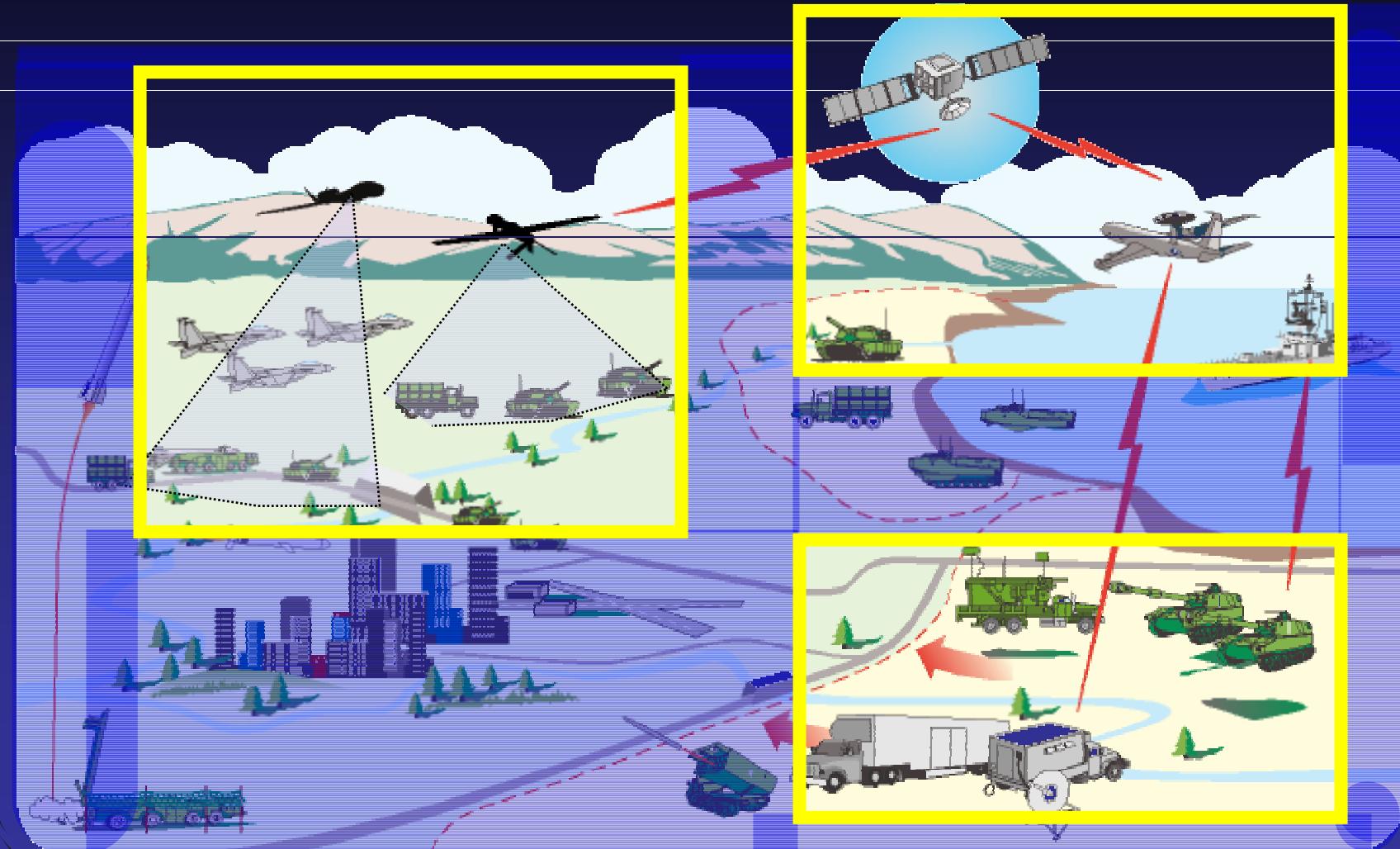
ISO

ISO Response

- Strategic Cyber Defense
- Total information Awareness
- Command and Control



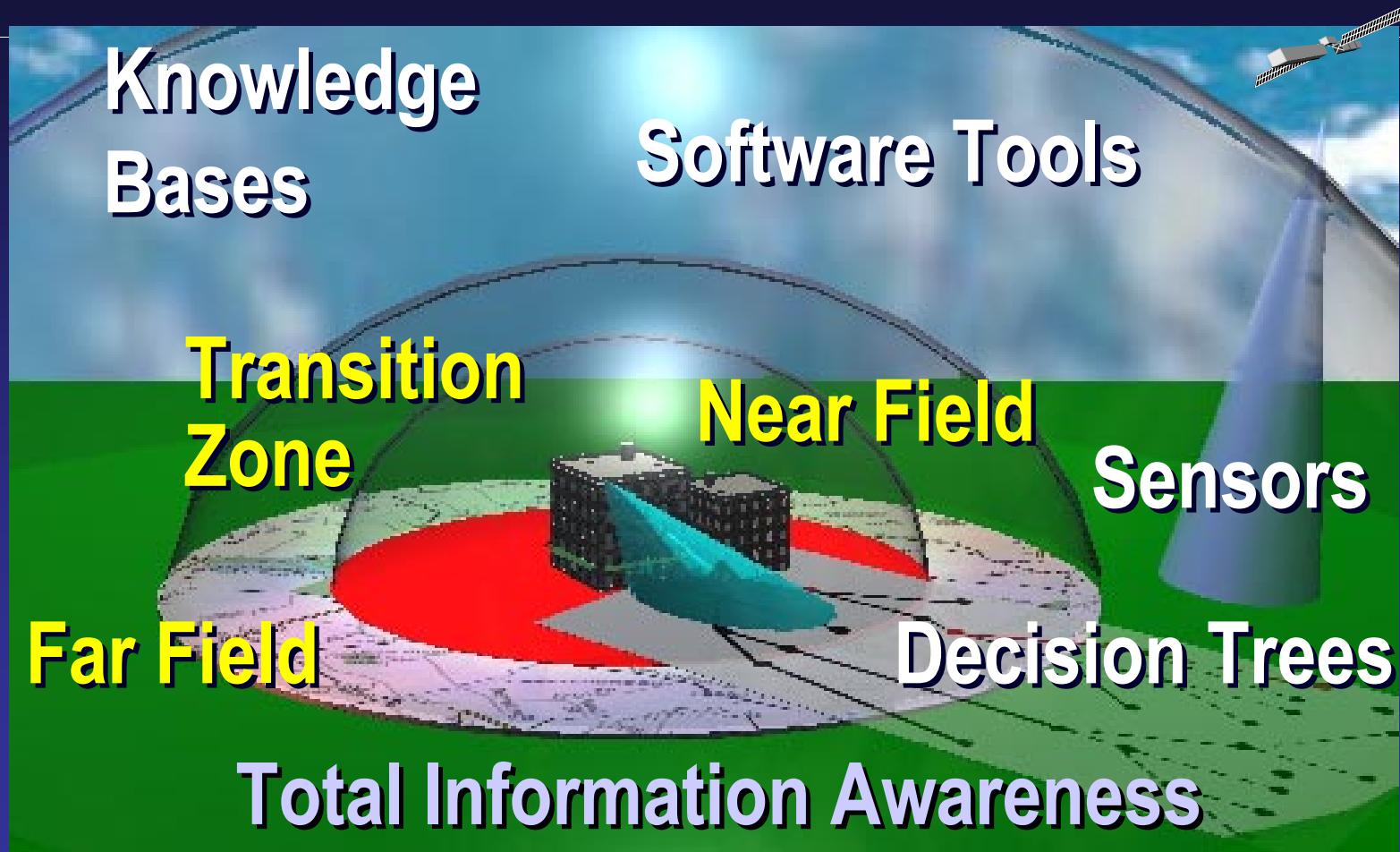
Force on Force - JV2010 ISO





ISO

Asymmetric Warfare





ISO

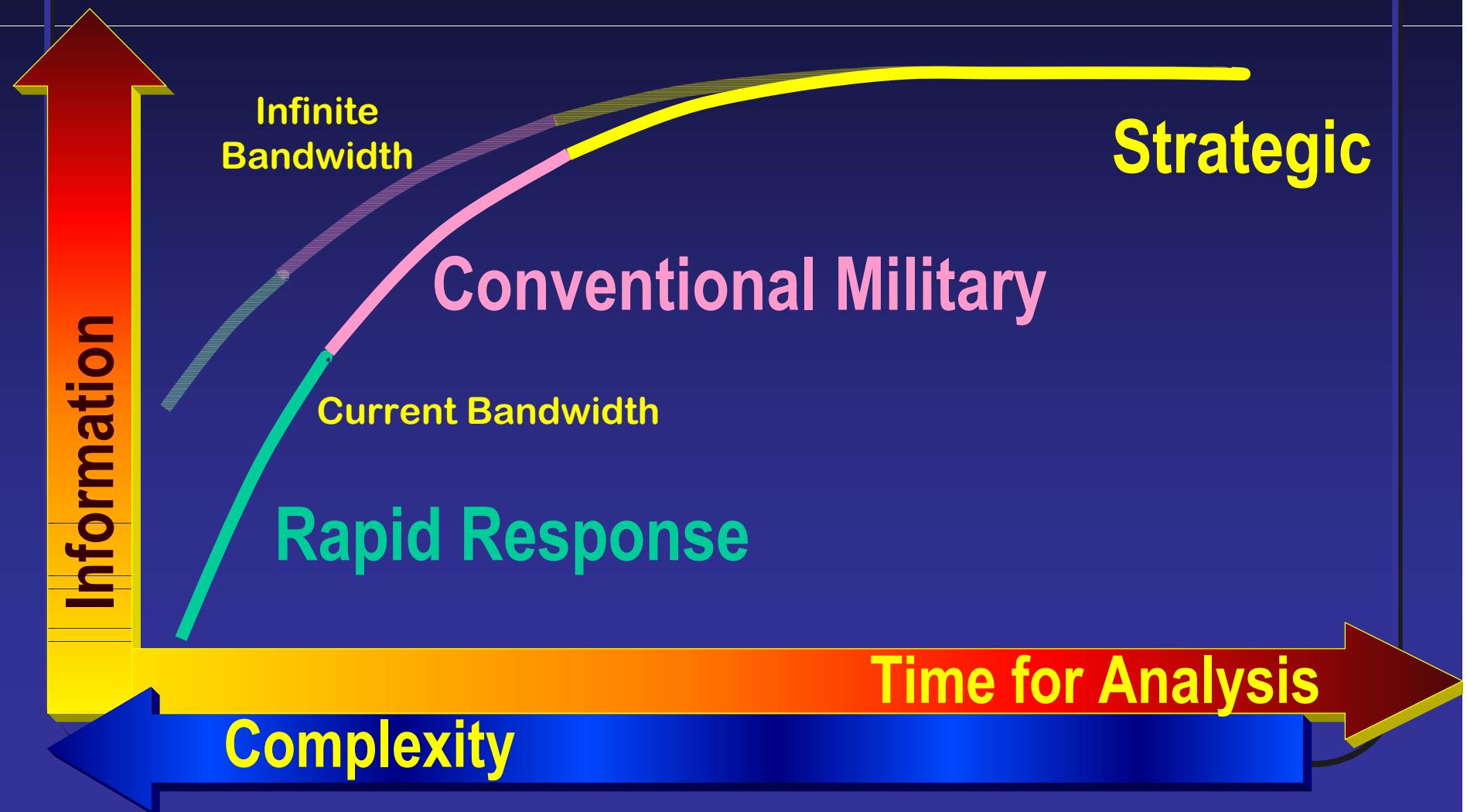
ISO Response

- Strategic Cyber Defense
- Total Information Awareness
- Command and Control



ISO

Command and Control





ISO

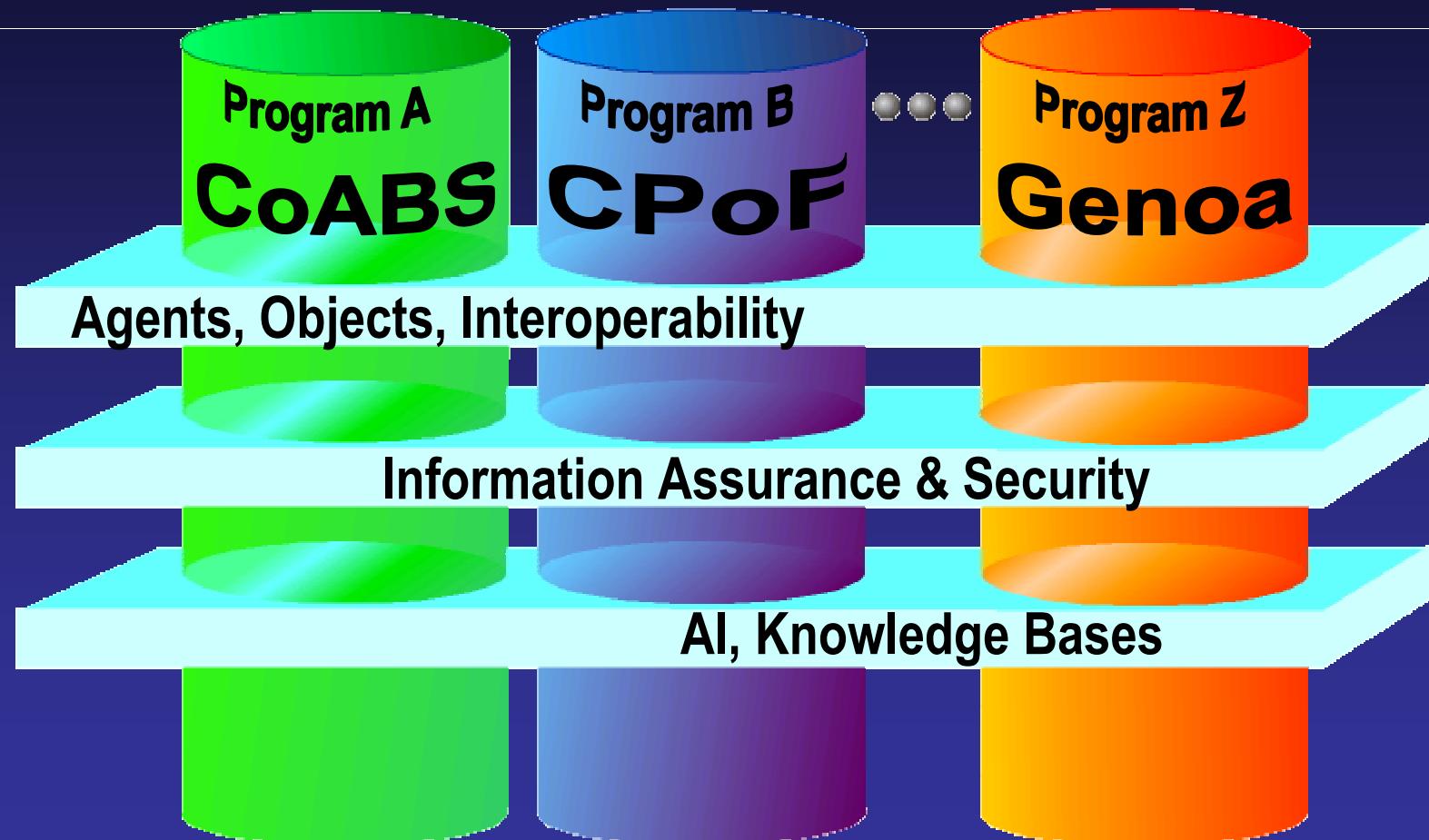
ISO Implementation

- **Strategic Cyber Defense**
 - ◆ Information Assurance
 - ◆ Information Survivability
- **Total Information Awareness**
 - ◆ CoABS
 - ◆ HPKB/RKF
 - ◆ Project GENOA
 - ◆ IU/IUFP
- **Command & Control**
 - ◆ ALP
 - ◆ JFACC
 - ◆ CPoF
 - ◆ Active Templates
 - ◆ JL-ACTD
 - ◆ BADD



ISO

ISO Technology Base





ISO

ISO Broad Agency Announcements

- | | |
|--|------------------|
| ● Active Templates | Summer 99 |
| ● Image Understanding for Force Protection | Summer 99 |
| ● Joint Forces Air Component Commander | Summer 99 |
| ● Rapid Knowledge Formation | Summer 99 |
| ● Project Genoa | Winter/Spring 00 |
| ● Strategic Cyber Defense | Summer 99 |